

REMARKS

This paper is responsive to the Non-Final Office Action dated January 13, 2005. Claims 11-29 and 33-44 were examined. Applicant thanks the Examiner for a thoughtful examination of all the claims.

Claim Rejections - 35 U.S.C. § 102

Claims 11-22, 33-35, and 37 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Sung et al. (U. S. Patent No. 6,218,876).

Applicant has amended claim 11 to include substantially the additional limitations recited in claims 23 and 29, and the further limitation that the respective input signal frequencies are substantially identical and the respective output signal frequencies are substantially identical. This amendment is believed to overcome this rejection.

There is no teaching or suggestion in the art of record for a circuit including, *inter alia*, two signal generation circuits, both configured to generate respective output signals having substantially the same frequency, from respective input signals having substantially the same frequency, and yet having respective intermediate frequencies that are different.

Similarly, Applicant has amended claim 33 to include substantially the additional limitations recited in claims 38 and 42 and the further limitation that the respective input signal frequencies are substantially identical and the respective output signal frequencies are substantially identical.

Even though the above amendments to claims 11 and 33 are believed to overcome the Examiner's rejection of the various claims dependent from these claims, Applicant nonetheless respectfully traverses several of the positions advanced by the Examiner in this rejection.

Regarding claim 12, the position has been advanced that selecting the bandwidth of a phase locked loop is merely a result of selecting the values of factors N1, M1; and K1 in PLL 52 and factors N2, M2, and K2 in PLL 54. Applicant respectfully disputes this assertion. For example, the factor K1 controls a divider that is not within the feedback loop of PLL 52, and thus cannot have an effect on the bandwidth of PLL 52. In addition, other circuits within a PLL, such

as the low pass filter (e.g., low-pass filter 94 in Sung's Fig. 3) contribute substantially to the determination of the loop bandwidth.

Regarding claim 14, Sung et al. provides no teaching or suggestion of a *selectable bandwidth* other than as might incidentally result from the selection of the values for M1 and N1.

Regarding claims 18-21, Sung et al. provides no teaching or suggestion of such limitations. There is no discussion of such limitations, nor any specific examples provided for the *range of values* of factors N1, M1, and K1 in PLL 52 and factors N2, M2, and K2 in PLL 54. Rather, a single specific example is provided which illustrates one set of exemplary values for these factors.

*Claim Rejections - 35 U.S.C. § 103*

Claims 23-29 and 38-44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sung et al. Applicant respectfully traverse this rejection in part.

Regarding claim 28, there is no suggestion in the art of record for two signal generation circuits having respective inputs that are nominally identical in frequency, but associated with independent serial data channels, as recited in the claim.

Regarding claim 29, there is no suggestion in the art of record that, in such a circuit, the first mentioned intermediate signal and the second intermediate signal have different frequencies, as recited in the claim. Rather, if any suggestion is present at all, it would be that two such circuits would be configured identically.

Likewise, regarding claim 42, there is no suggestion in the art of record for choosing the first and second intermediate signals to be different frequencies, as recited in the claim.

Claim 36 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sung et al. in view of Bjornholt (U. S. Patent No. 6,114,987). Applicant's amendment of claim 33 is believed to overcome this rejection.

Other Amendments

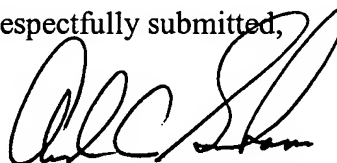
Various dependent claims have been amended consistent with the amendments to the claims from which they depend. Claims 29, 38, and 42 are canceled hereby. In addition, new dependent claims 45-50 have been added to better protect the invention. Each is well supported, and none adds new matter.

Summary

Claims 11-28, 33-37, 39-41, and 43-50 are now in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

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Respectfully submitted,



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